# **ULMSBTCH - Batch Output User Exit**

ULMSBTCH is a user-written routine used to examine and/or modify the parameters which the Com-plete batch spool output routines subsequently use to generate a DYNALLOC/SEGMENT call during batch printout spooling.

ULMSBTCH is dynamically loaded during Com-plete initialization. The module is invoked with service routine status (that is, it is in Com-plete's protect key). This means that if an abend occurs in the exit, all of Com-plete terminates abnormally.

This chapter covers the following topics:

- How to use ULMSBTCH
- ULMSBTCH conventions

## **How to use ULMSBTCH**

On entry to ULMSBTCH, a set of parameters is received in the form of a fullword pointed to by register 1. On return from the exit, the response in register 15 will be examined and processed.

# **ULMSBTCH** conventions

#### **Registers on entry**

Register 1: Address of parameter area

Register 13: 18-fullword save area

#### Registers at return

Register 15: Response code

All other registers must be unchanged.

#### **Parameters**

ULSTNAME	DS	CL8	Printout name	(X)
ULSTNUM	DS	AL2	Printout number	
ULSTCOPY	DS	AL2	Printout copies	(X)
ULSTFORM	DS	CL4	Printout form	(X)
ULSTHEAD	DS	XL1	Nr. of header pages to be generated (0=none, 2=default)	(X)
ULSTCLAS	DS	CL1	Output Class	(X)
ULSTOTID	DS	AL2	Original TID number	
ULSTNODE	DS	CL8	Output node	(X)
ULSTUSER	DS	CL8	Userid	(X)
ULSTOUSR	DS	CL8	Originating userid	
ULSTFLG1	DS	XL1	Flag byte	(X)
ULSTMNOS	EQU	X'80'	When on, no separators will be printed (that is, no skip to channel will be issued.	
ULSTHDR1			First header line	(X)
ULSTHDR2			Second header line	(X)
ULSTHDR3			Third header line	(X)

Note that macro CMULST now generates the appropriate DSECT. This must be used to remain compatible with future releases of Com-plete.

(X) indicates that the field can be modified by the user exit.

The header generated by the Batch output facility consists of three blocked lines of output:

ULSTOUSR ULSTNAME ULSTOUSR

These fields may be modified to suit your installation requirements.

#### **Return codes**

- $0 \ \ Com\mbox{-plete issues the DYNALLOC/SEGMENT using the parameters specified.}$
- 4 Com-plete assumes that the user exit has issued a valid DYNALLOC/SEGMENT call. The user exit is responsible for issuing and validating the DYNALLOC/SEGMENT call.
- 8 Com-plete rejects the printout request.

## **Using AFP printers**

You can use ULMSBTCH to setup an output descriptor for, e.g., AFP printers and tell Com-plete to use this output descriptor at the DYNALLOC macro for SYSOUT. To achieve this, proceed as follows:

- 1. Create the output descriptor using the IBM macro OUTADD. Specify PAGEDEF and FORMDEF based on the contents of ULSTFORM using your own relation table and/or algorithm.
- 2. Put the name of the output descriptor into ULSTNAME and switch on the x'40' bit (ULSTMOUD) in ULSTFLG1 to indicate there is an output descriptor.
- 3. ULMSBTCH itself is responsible for maintaining information about the output descriptors it already added, issuing OUTDEL macros when/if necessary, etc.